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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/581,434

Applicant(s)

SATO, YASUSHI

Examiner

FARZAD KAZEMINEZHAD

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/55/08)
Paper No(s)/Mail Date 9/29/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 9/29/2008 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

3. The disclosure is objected to because of the following informalities: on page 17 line 27 "predetermined data" is repeated twice.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The second and the third phrases in the claim limitation are not connected; i.e., the "a status" which is "transitioned" from the first phrase is not

linked to "a predetermined process item" in the second phrase. Therefore the examiner could not interpret that claim's limitation to examine it.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 29 and 30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Supreme Court precedent [1] and recent Federal Circuit decisions [2] indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example the steps recited of recognizing an input, assigning a weight factor to the input, setting a criteria associated with the input, and determining which process the input corresponds to based on the weight factor can all be performed mentally by a person. Therefore, some recitation of hardware performing the functionality would be preferable to ensure a machine is carrying out the above processes.

[1] *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

[2] *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-5, 21, 25, 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Sekiguchi (US Patent 7,143,045).

Regarding claim 1, Sekiguchi does teach a device control device (Abstract, Col. 1 lines 11-15 teach a data processing in a sensor used in a robot for providing instructions to a robot, or as disclosed in Col. 1 lines 49-53 electric home appliances such as an air conditioner) comprising:

input information recognition means (2) which recognizes input information to be input (Col. 3 lines 59-61 and Col. 23 lines 9-10 referring to unit 41 in Fig. 2 teach a unit for input processing of an input word indicating an operation of the said apparatus (e.g. robot));

process-item data storing means (D4) which stores a plurality of process items for executing processes corresponding to recognition information recognized by the

input information recognition means (2) (Col. 3 lines 20-25 teach a database in which words corresponding to instructing operations of the apparatus (i.e. words associated with a plurality of process items for executing operations (processes)) are stored; each word is processed (recognized) by natural language information; Col. 7 lines 53-55 referring to Fig. 2 teach these words are stored in the database unit 42); and

transition-definition data storing means (D5) which stores plural pieces of transition definition data defining transition from one process item in the plurality of process items to another process item (Col. 3 lines 35-37 teach a behavior pattern is associated with each word stored in the database unit 42 in Fig. 2 where each behavior pattern defines a certain state of the apparatus and thereby triggering it will result in a transition of the state of the apparatus; Col. 7 lines 63-66 teach the behavior database unit 45 in Fig. 2 stores the behavior data (i.e. transition-definition data)),

wherein

each piece of said transition definition data includes a condition corresponding to input information (Col. 9 lines 37-46 teach a behavior selector unit 44 in Fig. 2 which can select a behavior pattern corresponding to a certain state or condition of the apparatus which can best match (correspond to) an input word which does not have any stored data corresponding to it), and

a piece of transition definition data is selected from at least said recognition information and the conditions of the individual transition definition data, and a status is transitioned to a process item designated by the selected transition definition data (Col. 7 lines 56-62 and Col. 23 lines 19-23 teach a behavior execution unit 46 in Fig. 2 which

executes the behavior pattern corresponding to a recognized word associated with the behavior resulting in a transition of state of the device (e.g. robot)).

Regarding claim 2, Sekiguchi does teach the device control device according to claim 1, wherein said recognized information includes a likelihood (score) between input information and information to be compared (Col. 13 lines 43-51 teach a characteristic comparison classification unit 3 (Fig. 1) residing in a sensor (part of the apparatus (e.g. robot)) are utilized to compare input data corresponding to recognized information to the input (unit 1) with words (corresponding to actions) registered in database; Col. 14 lines 13-17 teach the comparison is made by using a similarity (likelihood) calculation utilizing a formula which evaluates a numerical (score) value and thereby enabling it to judge the comparison by using a numerical (score) value));

and said piece of transition definition data is selected using said likelihood (score) (Col. 14 lines 19-22 teach utilizing the numerical (score) value to determine if the input word matches with a word (corresponding to an action) in the database by comparing the numerical (score) with a threshold).

Regarding claim 3, Sekiguchi does teach the device control device according to claim 1, wherein when a jump is made from a predetermined process item to a process item or transition definition data which is not defined by transition defining data, transition definition data corresponding to the process item or transition definition data jumped from said predetermined process item is generated (Col. 9 lines 37-48 teach if a word data Wd (associated with a behavior or state of the device (e.g. robot)) is not

recognized (it is not defined and nor stored in behavior data base 45 in Fig. 2), the behavior selector unit 44 utilizes a combination of behavior patterns that are already stored in unit 45 and instructs the behavior execution unit 46 to execute it (i.e. to jump into the state corresponding to the behavior combination); Col. 10 lines 21-27 teach that if the final state which the device (e.g robot) has "jumped" is judged "OK", then the word data Wd is stored in the behavior database).

Regarding claim 4, Sekiguchi does teach the device control device according to claim 1, wherein said input information is a speech signal (Col. 7 lines 49-51 teach that the input process unit 41 in Fig. 2 is capable of receiving "word spoken by a man" (i.e. speech), and Col. 9 lines 18-20 teach the unit to possess speech recognition function) and

the condition of said transition definition data is a word associated with said transition definition data (Col. 9 lines 14-17 teach there exists an association between each spoken word W and a word data Wd which is stored in the behavior database unit 45 and which is associated with a behavior (causing or defining a transition of state of the device (e.g. robot)); i.e., the stored word data Wd defines a condition or state of the device).

Regarding claim 5, Sekiguchi does teach the device control device according to claim 1, wherein a plurality of conditions are set for said transition definition data (Col. 9 lines 63-67 and Col. 10 lines 1-3 teach a user creating (setting) criteria (conditions) for

each behavior (corresponding to a state of the device (e.g. robot) which can thereby trigger a state transition upon execution) and storing them in the criteria database unit 51 in Fig. 3).

Regarding claim 21, the claim limitations are identical to the limitations of the claim 1 and are therefore rejected under similar rationale. The speech recognition device is incorporated with the unit 41 (input process unit).

Regarding claim 25 the claim limitations are identical to the limitations of the claim 1 and are therefore rejected under similar rationale. The functions of an agent device are inherently performed by the modules depicted in Figs. 2 and 3 used for the first claim.

Regarding claim 31, the claim corresponds to the method limitations of the system of claim 1 and is therefore rejected by the same rationale. Sekiguchi does teach systems and their respective methods.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 6-10, 12-20, 22-24, 26-30, 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi, and further in view of Takagi et al. (US Patent 6,980,956).

Regarding claim 6, Sekiguchi does teach a device control device that stores plural pieces of transition definition data which defines transition from one process item in process items for executing processes corresponding to input information to another process item (same as limitations 2 and 3 of claim 1 and rejected under similar rationale),

selects a piece of transition definition data in accordance with the input information, and transitions a status to a process item designated by the selected piece of transition definition data (same as the last or fifth limitation of claim 1 and rejected under similar rationale),

wherein said transition definition data includes:

a condition corresponding to the input information (same as the 4th limitation of claim 1 and rejected under similar rationale) ,

Sekiguchi does not teach a weighting factor corresponding to said condition, and constants each of which is a standard for calculating said weighting factor and set for said transition definition data, and

a weighting factor of transition definition data relating to another process item linked to one process item whose status is transitioned is calculated by accumulating said constants from the constant for transition definition data relating to one process

item to the constant for transition definition data relating to the another process item.

Takagi et al. does teach a weighting factor corresponding to said condition (Col. 2 lines 6-10 teach that for a device (robot) "behavior" control, for each action which can alter the state (condition) of the device a weight factor is assigned; the weight factor is determined by computation of a transition probability), and

constants each of which is a standard for calculating said weighting factor and set for said transition definition data (Col. 7 lines 24-28 and Col. 14 lines 34-50 teach constants L, L1 and L2 which depend on predetermined stimuli on the device enable computation and updating of transition probability (weight factor) corresponding to state transformation of the device) , and

a weighting factor of transition definition data relating to another process item linked to one process item whose status is transitioned is calculated by accumulating said constants from the constant for transition definition data relating to one process item to the constant for transition definition data relating to the another process item (Col. 5 lines 51-67 and Col. 6 lines 1-3 referring to the modules MO2 and MO4 in Fig. 5 teach the transition probability of making transition from one state (process item) to another state (process item) is updated by raising or lowering it by a predetermined (constant) amount of for example 10% which in one example in Col. 7 lines 24-29 it is assigned the value L which according to Col. 13 lines 32-37 is correlated to the way a stimulus by a user such as tone of his voice is inputted; Col. 7 lines 25-27 teach a formula which shows that the transition probability corresponding to a certain behavior (state or process item) is obtained by adding (and thereby accumulating over many

transitions) the contribution of the transition probability of the previous state (corresponding to the previous process item or behavior) and the updated state which includes the predetermined constant L);

It would have therefore been obvious to someone with ordinary skill in the art at the time the invention was made that utilizing the transition probability modules and methods of Takagi et al. into the device operation apparatus of Sekiguchi by incorporating Tagaki et al.'s modules MO2 and MO4 in Fig. 4 of and their respective methods into the behavior selector unit 44 of Fig. 2 of Sekiguchi would enable the latter to associate weight factors to each state (behavior or process item) that the device is commanded to transform where the weight factor represents parameters of the stimulus such as the loudness of the voice of the user commanding the device which will alter the response of the device.

Regarding claim 7, Sekiguchi does teach a device control device comprising:
input information recognition means (2) which recognizes input information to be input (same as limitation 1 of claim 1);

process-item data storing means (D4) which stores a plurality of process items for executing processes corresponding to recognized information recognized by the input information recognition means (2) (same as limitation 2 of claim 1); and

transition-definition data storing means (D5) which stores plural pieces of transition definition data defining transition from one process item in the plurality of process items to another process item (same as limitation 3 of claim 1) , wherein

each piece of said transition definition data includes a condition corresponding to input information (same as limitation 4 of claim 1) and ,

said recognized information includes a likelihood (score) indicating a status of matching between said input information and the condition of said transition definition data (similar to the claim 2),

a piece of transition definition data is selected based on said discrimination result, and a status is transitioned to a process item designated by the selected transition definition data (same as limitation 5 of claim 1);

Sekiguchi does not teach a weighting factor corresponding to a condition associated with the input information and

a weighing factor is associated with a likelihood (score) corresponding to the condition of a transition definition data to obtain a result of discrimination for the condition of each transition definition data;

Takagi et al. does teach a weighting factor corresponding to a condition associated with the input information (Col. 2 lines 6-10 teach that for a device (robot) "behavior" control, for each action which can alter the state (condition) of the device a weight factor is assigned; the weight factor is determined by computation of a transition probability);

and a weighing factor is associated with a likelihood (score) corresponding to the condition of a transition definition data to obtain a result of discrimination for the condition of each transition definition data (Col. 13 lines 32-37 teach the transition probability or weight factor is associated with a stimulus; the stimulus does cause

transition of state or behavior of the device as each behavior is associated with a stimulus according to Col. 2 lines 42-46; Col. 7 lines 25-27, and lines 35-37 and lines 52-54 and lines 61-63 as well as Col. 14 lines 44-50 and Col. 16 lines 12-17 and lines 36-41 all teach formulas enabling calculation of the transition probability (weight factor) and thereby assigning a value (score) to it; these all result in assigning a score to the weight factor which corresponds to a stimulus (which can cause a transition and is therefore associated with a transition definition) causing alteration of the way a voice command is executed);

It would have therefore been obvious to someone with ordinary skill in the art at the time the invention was made that utilizing the transition probability modules and methods of Takagi et al. into the device operation apparatus of Sekiguchi by incorporating Tagaki et al.'s modules MO2 and MO4 in Fig. 4 of and their respective methods into the behavior selector unit 44 of Fig. 2 of Sekiguchi would enable the latter to associate weight factors to each state (behavior or process item) that the device is commanded to transform where the weight factor represents parameters of the stimulus such as the loudness of the voice of the user commanding the device which will alter the response of the device.

Regarding claim 8, depending on claim 7, the claim limitations are identical to the claim limitations of claim 3, and are therefore rejected under similar rationale.

Regarding claim 9, depending on claim 7, the claim limitations are identical to the

last two limitations of the claim 6, and are therefore rejected under similar rationale.

Regarding claim 10, Sekiguchi does not teach the device control device according to claim 9, wherein said transition constant changes, provided that transition definition data relating to said transition constant is selected.

Takagi et al. does teach the transition constant changes, provided that transition definition data relating to said transition constant is selected (Col. 7 lines 60-65 teach a formula which shows that the transition probability and thereby the transition constant which is attributed to the percentage of amount of change that the transition probability undergoes, changes as a function of the number of behaviors that the device is required to transfer to acquire the behavior consistent with the transition definition data).

It would have therefore been obvious to someone with ordinary skill in the art at the time the invention was made that utilizing the transition probability modules and methods of Takagi et al. into the device operation apparatus of Sekiguchi by incorporating Takagi et al.'s modules MO2 and MO4 in Fig. 4 of and their respective methods into the behavior selector unit 44 of Fig. 2 of Sekiguchi would enable the latter to estimate a weight factors attributed in transforming to a certain behavior pattern (consistent with a certain transition definition data) for the device which will aid the user in better management of the device.

Regarding claim 12, depending on claim 7, the claim limitations are identical to the last two limitations of the claim 4, and are therefore rejected under similar rationale.

Regarding claim 13, depending on claim 7, the claim limitation is identical to the limitation of the claim 5, and is therefore rejected under similar rationale.

Regarding claim 14, Sekiguchi does teach a device control device that has process-item data storing means (D4) which stores a plurality of process items for executing processes corresponding to recognized information obtained by recognizing input information (Col. 3 lines 20-25 teach a database in which words corresponding to instructing operations of the apparatus (i.e. words associated with a plurality of process items for executing operations (processes)) are stored; each word is processed (recognized) by natural language information; Col. 7 lines 53-55 referring to Fig. 2 teach these words are stored in the database unit 42);

defines transition from one process item in the plurality of process items to another process item by transition definition data (Col. 3 lines 35-37 teach a behavior pattern is associated with each word stored in the database unit 42 in Fig. 2 where each behavior pattern defines a certain state of the apparatus and thereby triggering it will result in a transition of the state of the apparatus; Col. 7 lines 63-66 teach the behavior database unit 45 in Fig. 2 stores the behavior data (i.e. transition-definition data)), and

generates a flowchart of process items by adding or deleting said transition definition data in accordance with a link to a necessary process item (Col. 15 lines 18-23 teach the flowchart of Fig. 10B corresponds to registration (addition) of words associated (linked) with data groups (transition definition data) by the word provision

unit 48 in Figs. 2 and 3, because each word is associated with data corresponding to a behavior which can cause transition of state associated with a device).

Regarding claim 15, Sekiguchi does teach the device control device according to claim 14, wherein said process-item data storing means (D4) is constituted in such a manner that a process item can be added adequately (Col. 22 lines 40-51 referring to the flow chart in Fig. 24 demonstrates that the process of utilizing the word provision unit 48 (Fig. 2 and 3) and thereby adding a word which defines a state (transition definition data) follows the judgment unit 47 assessing whether or not the input data (corresponding to the transition definition data) abides by the criteria (conditions) set forth in the model and therefore adequate measures are taken before adding the word corresponding to the data to the word provision unit 48).

Regarding claim 16, depending on claim 14, the claim limitation 4 of the claim 1 and is therefore rejected under similar rationale.

Regarding claim 17, depending on claim 6, the claim limitations are identical to the limitations of the claim 2, and are therefore rejected under similar rationale.

Regarding claim 18, Sekiguchi does teach the device control device according to claim 16, wherein said input information is a speech signal (corresponds to the first limitation of claim 4),

the condition of said transition definition data is a target word subject to speech recognition (corresponds to the 2nd limitation of claim 4) ,

said recognized information includes a likelihood (score) indicating a status of matching between the speech signal and the target word of said transition definition data (corresponds to the first limitation of claim 2) ,

said likelihood (score) corresponding to the target word of said transition definition data is set in said transition definition data (corresponds to the second limitation of claim 2), and

a piece of said transition definition data is selected in accordance with said likelihood (score), and a state is transitioned to a process item represented by said selected piece of transition definition data (it corresponds to the last limitation of the claim 1).

Regarding claim 19, depending on claim 14, the claim limitations are identical to the limitations 3 and 4 of the claim 6, and are therefore rejected under similar rationale.

Regarding claim 20, depending on claim 19, the claim limitations are identical to the last two limitations of the claim 6, and are therefore rejected under similar rationale.

Regarding claims 22, 23 and 24, the claims' limitations are identical to the limitations of the claims 6, 7 and 14 respectively and are therefore rejected under similar

rationale. The speech recognition device is incorporated to the unit 41 (input process unit) of Sekiguchi.

Regarding claim 26 the claim limitations are identical to the limitations of the claim 6 and are therefore rejected under similar rationale. The functions of an agent device are inherently performed by the modules (in both Sekiguchi (Figs. 2 and 3) and Takagi et al.(Fig. 4)) used for the claim 6.

Regarding claim 27 the claim limitations are identical to the limitations of the claim 7 and are therefore rejected under similar rationale. The functions of an agent device are inherently performed by the modules (in both Sekiguchi (Figs. 2 and 3) and Takagi et al.(Fig. 4)) used for the claim 7.

Regarding claim 28 the claim limitations are identical to the limitations of the claim 14 and are therefore rejected under similar rationale. The functions of an agent device are inherently performed by the modules (in both Sekiguchi (Figs. 2 and 3) and Takagi et al.(Fig. 4)) used for the claim 14.

Regarding claims 29 and 30 the claim limitations are identical to the limitations of the claim 6 and 4 respectively and are therefore rejected under similar rationale. The database modules in Figs. 2 and 3 of Sekiguchi (Figs. 2 and 3) used in claim 6 are responsible for the management of the data structures.

Regarding claim 32-33, the claims correspond to the method limitations of the systems of claims 7 and 14 respectively and are therefore rejected by the same rationale. Sekiguchi and Takagi et al. both teach systems and their respective methods.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hammler et al. (US Patent 2007/0073543).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FARZAD KAZEMINEZHAD whose telephone number is (571)270-5860. The examiner can normally be reached on M-F 8:30AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis I. Smits can be reached on (571)272-7628. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/FK/

/Talivaldis Ivars Smits/
Primary Examiner, Art Unit 2626

6/29/2009